

The invention claimed is:

1. An apparatus for orienting sections of a plasticized ceramic extrudate, comprising:
 - a marking assembly for applying an orientation reference mark to a plasticized ceramic extrudate exiting an extrusion die onto an extrudate support;
 - at least one extrudate-contacting orientation control member for correcting the orientation of a cut section of the extrudate on the extrudate support in response to a visual indicator of a misalignment of the reference mark;
 - at least one gripping member adapted to laterally transfer the cut section of the extrudate along a linear path with respect to the extrudate support while preventing any orientation change of the cut section of the extrudate support; and
 - a visual inspection apparatus adapted to confirm the orientation of the cut section of the extrudate on the extrudate support.
2. The apparatus of claim 1, wherein the marking assembly comprises an ink jet marker.
3. The apparatus of claim 1, wherein the extrudate support comprises an air bearing.
4. The apparatus of claim 1, further comprising:
 - a corkscrew correction assembly adapted to correct a corkscrew deformation of the extrudate caused by the extrusion die.
5. The apparatus of claim 1, wherein the at least one gripping member comprises at least one foam contact elements.

6. The apparatus of claim 1, wherein the visual inspection apparatus comprises a first camera for inspecting a first end of the extrudate and a second camera for inspecting a second end of the extrudate.
7. The apparatus of claim 1, wherein the extrudate support comprises a first section for receiving the extrudate exiting the extrusion die, and a second section separated from the first section, wherein the gripping member is adapted to laterally transfer the cut section of the extrudate along the extrudate support between the first section and the second section of the extrudate support.
8. A method for orienting sections of a plasticized ceramic extrudate, comprising:
applying a reference mark to a plasticized extrudate as the extrudate exits an extrusion die onto an extrudate support;
supporting the extrudate on the extrudate support;
cutting the extrudate to form a cut section of the extrudate;
correcting the orientation of the cut section of the extrudate in response to a reference mark misalignment and as the extrudate is supported by the extrudate support;
transferring the cut section of the extrudate along a length of the extrudate support while preventing any orientation change of the cut section; and
visually inspecting the orientation of the cut section of the extrudate.
9. The method of claim 8, wherein the reference mark applying step comprises applying an ink jet mark to the extrudate.

10. The method of claim 9, wherein the visually inspecting step comprises visually inspecting first and second ends of the extrudate.

11. The method of claim 10, further comprising:

correcting for a corkscrew deformation of the extrudate by adjusting a corkscrew correction assembly in response to the visual inspection of the extrudate.

12. The method of claim 8, wherein the step of supporting the extrudate comprises supporting the extrudate on an air bearing.

13. The method of claim 8, wherein the transferring step comprises transferring the cut section of the extrudate between a first section of the extrudate support and a second section of the extrudate support, wherein the first and second sections of the extrudate are separated from one another.

14. An apparatus for orienting sections of a plasticized ceramic extrudate, comprising:

a marking assembly for applying an orientation reference mark to a plasticized ceramic extrudate exiting an extrusion die onto an extrudate support; and

at least one extrudate-contacting orientation control member for correcting the orientation of a cut section of the extrudate on the extrudate support in response to a misalignment of the reference mark.

15. The apparatus of claim 14, further comprising:

a visual inspection apparatus adapted to confirm the orientation of the cut section of the extrudate on the extrudate support.

16. The apparatus of claim 14, wherein the marking apparatus comprises an ink jet marker.

17. An apparatus for correcting deformation of a plasticized ceramic extrudate exiting an extrusion die, comprising:

a support frame; and

at least one extrudate-contacting deformable roller operably coupled to the support frame and having an axis of rotation, wherein the axis of rotation is pivotable with respect to a movement of an extrudate exiting an extrusion die, and wherein the roller is adapted to contact the extrudate and correct a corkscrew deformation of the extrudate exiting the extrusion die.

18. The apparatus of claim 17, wherein the at least one roller comprises a pair of spaced apart rollers.

19. The apparatus of claim 17, wherein the at least one roller is vertically adjustable.